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InsurAI – The Overtaking Lane in The Insurance Race

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Abstract The research introduces the InsurAI model as a new paradigm in insurance, where AI evolves from the role of a simple automation tool to that of a business partner, responsible assistant, and security guarantor. It evaluates the transformative impact of AI on the insurance industry, seen in terms of dynamic pricing, individualized customer service, real-time risk evaluation, enhanced claims processing, fraud prevention, and conscientious customer behavior. It reviews regulatory requirements in relation to transparency, explainability and fairness as opportunities to build an ethical and responsible InsurAI. It addresses challenges in deploying AI in insurance - ranging from technical and organizational difficulties to regulatory compliance risks and adversarial AI threats. From the analysis, the research underlines the necessity of targeted investments in infrastructure, skills, and data, as well as sticking to monitoring the impact of its integration. The notable finding is that the future of InsurAI is no longer whether insurance companies will deploy it, but how and with whom it will develop.

Keywords InsurAI, Insurance, Artificial Intellect, Embedded Insurance, Responsible AI, Adversarial AI, Usage-Based Insurance.

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Introduction

The insurance industry is experiencing rapid development, creating a next-generation digital ecosystem where Artificial Intelligence (AI) plays a pivotal role. With the rapid implementation of technological solutions, not only business models but even overall paradigms within the industry are being revolutionized. In all such developments, the conceptual and applied InsurAI model is becoming increasingly important. It encompasses technologies such as machine learning, big data processing, and cognitive systems along the entire insurance value chain. It does not just automate processes—instead, it provides the ground for entirely new insurance logic, from predictive risk assessment to personalized policies and self-learning customer service systems. InsurAI is the answer to the increas-ingly dynamic environment and digitally-minded customer demands as well as the requirements of increased regulatory compliance and ethical accountability in decision-making.

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At the core of InsurAI lies *the concept of efficiency, trust, and security*. With Explainable AI insurers are empowered to explain the actions they take in understandable human language - a key to bolstering customer trust and regulatory compliance. At the same time, InsurAI incorporates risk management for vulnerabilities such as „Adversarial AI", employing resilient system architectures and insurance mechanisms that function both preventively and compensatorily. InsurAI is much more than just technological innovation – it is a new mindset and practice framework in which regulation, ethics, and market adaptation coexist in full alignment.

The primary drivers of insurance industry adoption of AI are causally connected to the increased demand for *adaptability and competitiveness* within the environment of accelerated digitalization. The development of AI in insurance is not so much the result of technological determinism as the convergence of the requirements for personalized products, the need to process big data, and the limitations of conventional analytical methods to deal with the complexity of business processes. The accumulation of vast amounts of heterogeneous data from sensors, smartphones, social media, and IoT ecosystems creates opportunities for AI to be leveraged to the benefit of both insurers and customers.

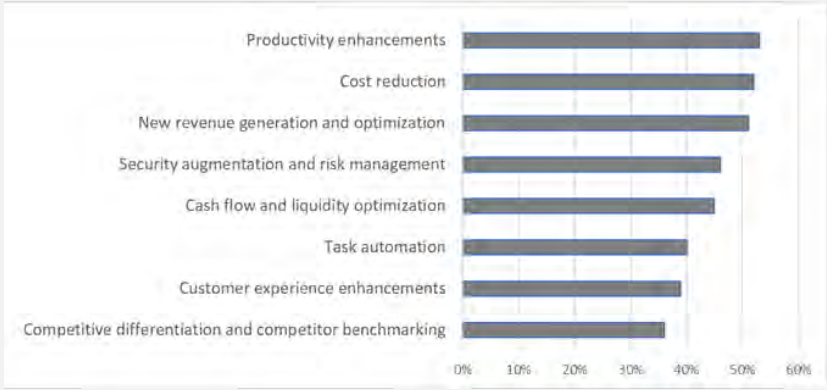

Fig. 1. Key drivers for the adoption of AI technologies in insurance (EY-Parthenon, 2024)

Interest in the use of AI in the insurance industry has grown significantly over the past decade. The EY-Parthenon (2024) survey shows that 99% of insurance companies worldwide are already investing, planning to invest, or expressing strong interest in implementing AI. Nearly half of them (42%) are in the phase of actual incorporation. Among the key motivating factors behind this interest are the expected benefits in three main areas: *productivity, cost reduction, and revenue growth* (fig. 1). More specifically, two-thirds of all survey respondents expect revenue to increase by more than 10% (EY-Parthenon, 2024: 9). The interest in AI is not limited to any specific product segment. Globally, 62% of life insurers (L&A) are applying AI to some extent, while this figure stands at 39% for property and casualty insurers (P&C). The highest level of interest is observed among InsurTech companies, with 75% actively engaged.

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Declared interest is also seen in focused priorities: automation of the underwriting process, predictive risk management and individualized customer advice. Insurers' position demonstrates *a strategic shift* from opportunistic experimentation to systematic projects backed by management leadership. This pairing of technology innovation and top-down management strategy signifies a mature vision of AI and its role as a foundational pillar in the transformation of business models.

1. The advantage of moving „from static to dynamic" management

The technological progress of modern societies enables seamless connectivity between personal devices and the real-time accumulation of big data. In this context, the application of AI to data processing enhances the analytical capabilities of insurance companies and enables them to respond more quickly to changes in risk. Combining AI with technologies such as smartwatches, telematics devices in vehicles, and Internet of Things (IoT) sensors makes it possible to analyze thousands of data points per second—essential for accurate risk assessment. Vehicle telematics, for instance, can capture up to 1,200 parameters from a specific car, allowing AI to dynamically and individually calculate risk and determine premiums with remarkable accuracy (Pingili, 2024). As a result, insurance is no longer a fixed arrangement but *has become a dynamic service that continuously adapts* to the behavior of the policyholders and the condition of their assets. These real-time data streams not only enable personalized premium pricing but also support effective prevention through early detection of anomalies and opportunities for improvement.

Real-time insurance pricing is among the strongest arguments for the use of AI. Based on real, constantly evolving data about the behavior of policyholders, it is more effective than traditional actuarial methods that rely on aggregated group data. Through the application of telematics in car insurance and wearable data in health insurance, insurers can assess risk at any given moment, with premiums adjusted to reflect each customer's individual profile. Excessive hard braking, abrupt acceleration, or mobile phone use while driving can be discouraged through higher premiums, while safe driving behavior is rewarded with discounts (Bhattacharya et al., 2025).

Dynamic pricing not only increases the accuracy of insurance calculations, but also stimulates behavioral change among policyholders, as they are encouraged to adopt safer habits. This is consistent with the theory of behavioral insurance, which postulates that insurance pricing should be based on a customer's current behavior rather than solely on demographic and historical data, in order to prevent certain market anomalies (Margan and Logan, 2025). A good example in this context is usage-based insurance (UBI), such as "pay-how-you-drive" and "pay-as-you-live," which, when administered with the aid of AI, can become even more accurate and fair. This represents an excellent example of price differentiation in auto insurance, focusing on the individual risk of policyholders while also optimizing the insurer's portfolio risk.

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Through the use of AI, insurers can now *expand their capacity* to process big data. In some cases, they are processing information up to 400 times faster than with traditional methods, substantially streamlining the evaluation and updating of risk models (Tase, 2024). This exponential increase in computational power allows for the early identification of emerging risks that have neither been observed nor accounted for in actuarial practice. Furthermore, AI methodologies have the potential to accurately model rare but high-impact risks—such as natural disasters, epidemics, or coordinated cyberattacks—supporting the development of scenarios for assessing the resilience of insurance portfolios (Kuppan et al., 2024). AI also uses synthetic data for real-time stress testing, enhancing insurers' risk forecasting capabilities. Dynamic models further strengthen the preventive function of insurance by enabling the early detection of potential crises.

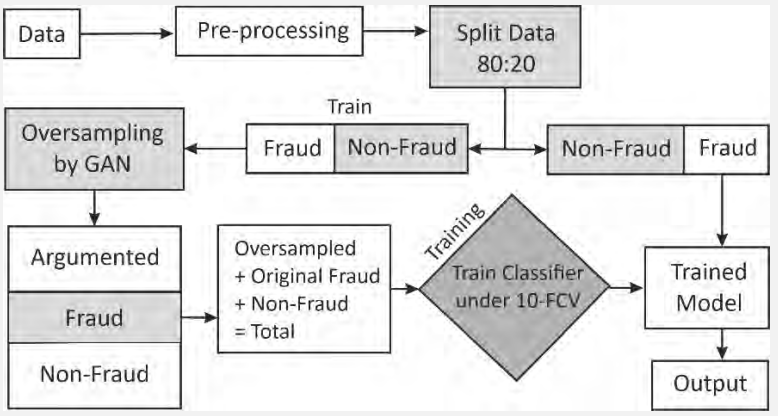

Fig. 2. GAN-based model for insurance fraud detection (Kate et al., 2022)

AI makes it possible to track the behavior of policyholders throughout the entire duration of the insurance contract. This provides a significant *advantage in the fight against insurance fraud*. Machine learning and AI-powered systems can detect anomalies in real time by continuously comparing actual customer behavior with established behavioral patterns. Technologies such as Variational Autoencoders (VAEs) and Generative Adversarial Networks (GANs) [1] enable the detection of deviations that might go unnoticed using conventional control methods (Gangani, 2024). Fig. 2 illustrates an example of a GAN-based fraud detection model combined with a classifier, evaluated using ten-fold cross-validation (10-FCV). This is especially important in health or car insurance claims, where even slight behavioral changes may indicate fraudulent activity.

[1] Generative Adversarial Networks are a type of AI consisting of two neural networks—the generator and the discriminator, that "compete" with each other. The generator creates artificial data, while the discriminator attempts to distinguish between real and fake data. Over time, both networks improve, resulting in the generation of increasingly realistic cases.

The use of AI to address insurance fraud can dramatically reduce reliance on costly and often ineffective manual checks. While traditional practices commonly rely on "red flags" followed by manual reviews, intelligent systems provide real-time probabilistic risk assessment by integrating broad behavioral and contextual data streams (Amerirad et al., 2023). Through the dynamic detection of fraudulent activity, *AI becomes a guarantor* of fair compensatory insurance legal relationships and strengthens the stability of the insurance system against both internal and external abuses.

AI-powered insurance automation generates dynamic business and societal benefits. However, its application in business processes is fraught with challenges. Some are of a purely technological nature, while others concern the structure of managerial decision-making and business models. In reality, there are both hardware and software issues with the integration of legacy systems and emerging digital infrastructure, which inhibits the effective aggregation, processing, and utilization of data. Insurance companies use only 10–15% of the data they collect in the management process (Tase, 2024), which indicates not so much a lack of information, but rather *an inability to transform it* into actionable decisions with the help of AI. This creates a fragmented operational environment where technological capabilities cannot be fully leveraged.

2. Shifting customer focus „from product to experience"

The InsurAI model *can revolutionize the customer experience* by creating conditions for increased satisfaction through timeliness, relevance, and personalization of services. By „intelligently" using data from multiple sources, insurers can issue policies instantly, fully customized to the unique needs of each client. This makes the contract process easier and more transparent. For example, the American insurer Markel uses AI to insure business clients against complex risks in under two hours, while digital insurer Haven Life activates life insurance policies in just 20 minutes. When customers receive exactly what they need, at the right moment, satisfaction with insurance coverage increases significantly.

AI-powered virtual assistants and chatbots developed by insurers offer continuous access to services, removing common customer barriers related to time and language. These technologies provide clients with 24/7 support in their preferred language, including features such as automated document translation and explanations of complex contractual terms. Digital insurance solutions like AVIVA's virtual assistant and the Digital Voice project illustrate how natural language processing (NLP) technologies can enhance the customer experience through accessible and personalized communication (Zarifis et al., 2019). When such systems are designed with attention to transparency, ethics, and empathy, they *reinforce the perception of care and understanding* on the part of the insurer—an essential factor in building trust and customer loyalty (fig. 3).

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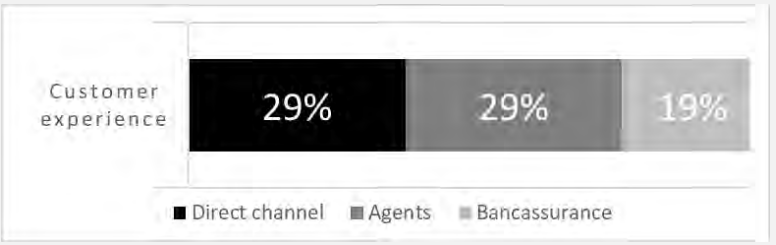

Fig. 3. Customer experience improved across insurance channels in 2004 (IBM Institute for Business Value, 2024)

Another direction for reshaping the customer experience in insurance lies at *the intersection of AI and gamification*. Gamified features such as rewards, badges, progress bars, and financial challenges foster greater policyholder engagement and encourage behaviors that align with insurers' goals—such as safe driving or healthy living. When these game mechanics are powered by AI, their impact becomes even more adaptive, as algorithms can determine which incentives are most effective for different user segments based on behavioral analysis. The customer is thus no longer merely a passive recipient of services, but *an active participant in managing their own risk*. Wellness applications like HealthifyMe use AI and gamification to monitor customer behavior and deliver personalized health advice through game-like interfaces (Jain and Roy, 2022). This increases satisfaction and transforms innovation into long-term value for both policyholders and insurers.

Enhanced customer experience is *most clearly demonstrated in embedded insurance*, where coverage is seamlessly integrated into other products or services. Instead of seeking insurance separately, the customer receives appropriate protection—for instance, when booking a flight, renting a car or purchasing electronic goods. This simplifies insurance distribution and reduces the need for complex procedures. The seamless integration of AI into these processes enables insurance offerings to be adapted to the specific context of each customer action, making insurance protection *an invisible yet ever-present service*. It is precisely this level of unobtrusive, intelligent support that leads to maximum customer satisfaction in today's era of digital insurance.

In the digital era, accelerating and improving claims processing has become a key factor in improving customer experience. AI-based innovations *have reduced processing times from weeks to minutes*, and in some cases, even to seconds. A remarkable example is Lemonade (USA) and its system „AI Jim", which processes low-complexity claims in about three seconds by automatically validating data, checking policy compliance, and making approval or denial decisions entirely without human input (Bates, 2023). AXA has also made notable progress: by using AI-powered image recognition to assess vehicle damage, the company achieves up to 95% accuracy and reduces the need for in-person inspections by 80% (Tase, 2024). According to a McKinsey study, digital innovations in claims handling can increase customer satisfaction by as much as 40% (Balasubramanian et al., 2021). The use of robotic process automation (RPA), blockchain, and generative AI further optimizes claims processing by eliminating manual steps, increasing transparency, and enhancing

accuracy—reducing delays and reinforcing a perception of reliability and efficiency for the customer (Dhanekulla, 2024).

InsurAI also improves the customer experience by *expanding insurers' product offerings*. The introduction of subscription-based products—such as "on/off" insurance—enables coverage to be automatically activated or deactivated. For example, travel insurance may activate when a customer travels abroad, or temporary property insurance may apply when renting accommodation through platforms like Airbnb. These capabilities are made possible through AI-enabled real-time data processing. Enhanced risk diagnostics and the ability to evaluate individual risk manifestations, rather than relying on aggregated data, also support the development of on-demand and usage-based insurance models. These new digital offerings are easy to obtain, quick to activate, and available remotely—factors that explain their rising popularity. However, they also *introduce new social risks* that are often overlooked by consumers. Such products may lead to social isolation, reduced interpersonal contact, and increased digital dependency. In the long term, this could contribute to health issues that, ironically, may themselves be insured through digital coverage.

3. Moving „from tech enthusiasm to regulatory awareness"

The insurer's enthusiasm to offer AI-based solutions is increasingly confronted with a range of ethical, legal, and social risks, leading to the need for regulatory frameworks. The most obvious reasons behind the need for regulatory safeguards stem from *the loss of trust* due to algorithmic opacity and the lack of clearly assignable responsibility in case of errors. AI systems are likely to be "black boxes," making their decisions difficult to explain or justify by the affected parties. The use of unverified or historically biased data may result in algorithmic bias and discriminatory outcomes, e.g., in premium quotations or denial of risk coverage for specific vulnerable groups. The absence of a clearly responsible party for automated decisions raises concerns regarding fairness and accountability within the system. Furthermore, the security of personal data, especially sensitive information, can be vulnerable to cyberattacks and malicious access. This issue is particularly critical for AI systems that collect and process large volumes of data.

Over time, enthusiasm for AI technologies has come up against *some of their inherent "bugs"*. Of special concern is the emergence of so-called Adversarial AI—a technique in which input data is maliciously manipulated (e.g., falsifying medical images) in an effort to trick AI systems into making incorrect decisions. While these kinds of changes might escape human visual perception, they can have serious consequences in the insurance industry, such as the approval of fraudulent claims or *the manipulation of risk profiles*. Research has shown that minor digital perturbations can cause AI models to classify a medical image as pathological with high accuracy (Amerirad et al., 2023). Not only do these attacks undermine confidence in AI models, but they also increase the likelihood of financial loss and erode trust in autonomous decision-making. Proposed solutions include not just

technical countermeasures such as adversarial training and certified defenses[2], but also clear regulatory guidelines to strengthen analytical maturity in the insurance sector.

All these difficulties have prompted the EU to take decisive steps toward establishing a regulatory framework for AI, including the GDPR (2016) and the recently enacted AI Act (2024). While the GDPR focuses on *the protection of personal data* and the right of customers *to be informed of automated decision-making*, the AI Act classifies AI systems into four categories—ranging from minimal-risk to strictly prohibited. AI systems used in the insurance industry tend to fall into the high-risk category. As a result, AI-based processes such as underwriting, claims handling, and behavioral assessment must comply with strict standards for transparency, traceability, human oversight, data quality and process documentation. EIOPA has also been engaged in shaping the regulatory landscape by publishing ethical principles and guidelines for the use of AI in insurance. These principles emphasize the need for compatibility between technological solutions and fundamental rights, including protection against algorithmic bias and discrimination (Pareek, 2025).

US artificial intelligence regulation is applied through a decentralized model with *flexible regulatory requirements* tailored to business needs. Two of the key policy instruments in this context are the Blueprint for an AI Bill of Rights (2022) and the Presidential Executive Order on AI (2023), both of which place significant emphasis on transparency, the capacity for human oversight, and the right to opt out of automated decisions. As a result, U.S. insurers have adopted their own codes of ethics and mechanisms for algorithmic oversight (Sloane and Wüllhorst, 2025). In contrast, China *follows a centralized doctrine* under which insurance companies' use of algorithms must be registered and audited by state authorities, along with explicit bans on discriminatory pricing practices. Chinese insurers are subject to significantly higher standards for transparency and fairness. It is evident that, at the international level, there is *considerable diversity in regulatory approaches*—reflecting the cultural, political and economic differences among countries.

Regulatory fragmentation across jurisdictions presents significant challenges for cross-border insurance operations, particularly due to differing data protection standards, Know Your Customer (KYC) procedures, and algorithm-based decision-making. This underscores the need for regulatory compatibility and harmonized compliance management strategies. In response to these challenges, RegTech has emerged as a key solution, offering real-time monitoring tools for regulatory requirements. These systems help insurers *conduct automated audits*, detect anomalies in transactions, and generate timely and accurate reports for regulatory authorities. Their implementation in the insurance sector significantly

[2] Adversarial training is a method of protecting AI systems by incorporating adversarially modified examples during the model's training process. Ideally, the system learns to recognize and neutralize them, thereby increasing its robustness during real-world deployment. Certified defenses, on the other hand, are based on mathematical simulations that guarantee a model's robustness against a specific type of attack over a certain range of perturbations. They offer theoretically well-founded security, in contrast to empirical approaches, though they can be computationally expensive.

reduces regulatory risk and administrative costs, while enhancing legal certainty in the use of AI (Onabowale, 2025).

The concepts of Explainable AI (XAI) and Responsible AI (RAI) are increasingly relevant as strategic priorities in the insurance industry. XAI aims to develop algorithmic systems whose decisions are *understandable, traceable and transparent* to customers and auditing authorities. This is among the most crucial drivers of trust, particularly in cases where automated decisions affect the rights and liabilities of policyholders. The adoption of XAI will also become an increasingly important competitive advantage, as the concept enhances customer experience and fosters positive perceptions (Owens et al., 2022). In this context, the EU's AI Act introduces the principle of "Explainability by Design," requiring insurance-related AI systems to be developed with *built-in explanatory capabilities* from the design stage, using tools such as impact assessments, audits and mechanisms for human interpretation of outputs.

Alongside XAI, the concept of RAI is also emerging, with an emphasis on *the application of ethical principles* in each phase of the AI system lifecycle—from goal definition and algorithm design to deployment and performance tracking. Ethical principles include transparency, data privacy, non-discrimination, fairness and the opportunity for human override in the decision-making process. AI may occasionally provide incorrect recommendations, "hallucinate," or mislead, and such behavior must be controlled through adherence to ethical standards, with clear responsibility for any resulting loss. According to IBM's research, 67% of customers believe that insurers should be responsible for mistakes caused by AI (IBM Institute for Business Value, 2023). It is clear that policyholders expect not just automation, but ethical and accountable AI-based service.

Conclusion

Artificial intelligence is irrevocably transforming the insurance industry, enhancing its competitiveness and robustness. The InsurAI model is reshaping both *internal company processes and customer interactions*. Insurers are increasingly entrusting AI with core functions such as claims processing, risk analysis, fraud detection and pricing. The main drivers of this change are AI's ability to accelerate administrative procedures, improve the accuracy of forecasts, and reduce losses due to imprecise or delayed information. InsurAI enables faster, more accurate and more personalized services, significantly increasing customer satisfaction and overall experience.

As the capabilities of AI increase, the insurance industry is moving towards *a time of strategic evolution*, where technology not only automates tasks but is also becoming an active decision-making partner. McKinsey's prediction that insurance would shift "*from indemnification to prevention*" is beginning to take tangible form in the context of AI technologies. InsurAI enables insurers to detect and respond to risks before they happen—a practice that not only reduces claims but also builds resilient, long-term customer relationships. In

this context, AI is becoming a driver of innovation that contributes not only to operational efficiency but also to the social responsibility of the industry.

A look into the near future reveals an even more *digitalized, integrated and customer-centric* insurance world. Expectations point toward the full decentralization of services through technologies such as blockchain and smart contracts, enabling automated, secure and transparent methods of policy issuance and management. Embedded insurance is also set to go mainstream, particularly with the entry of major players like Amazon, Google, Apple, and Tesla into the sector. This will redefine the distribution model and raise new questions about partnerships and competition. In this new world, the key question will no longer be whether insurers use AI, but *how they do it—and with whom*. Regulators will face the challenge not just of keeping up with the pace of technological change, but of understanding and addressing the depth of the transformation.

References

1. Amerirad, B. et al. (2023). *Adversarial Artificial Intelligence in Insurance: From an Example to Some Potential Remedies*. Risks, 11(20). DOI: 10.3390/risks11010020.
2. Balasubramanian, R., Libarikian, A. and McElhaney, D. (2021). *Insurance 2030: The impact of AI on the future of insurance*. McKinsey & Company. Available at: https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/insurance-2030-the-impact-of-ai-on-the-future-of-insurance (Accessed: 4 May 2025).
3. Bates, P. (2023). *The Power of AI in Finance*. Digital Finance. Italy: Bound Studios.
4. Bhattacharya, S., Castignani, G., Masello, L. and Sheehan, B. (2025). *AI revolution in insurance: Bridging research and reality*. Frontiers in Artificial Intelligence, 8, Article 1568266. DOI: 10.3389/frai.2025.1568266
5. Dhanekulla, P. (2024). *Blockchain and Distributed Ledger Technology in Modernizing Insurance Systems: Enhancing Transparency and Reducing Fraud*. International Journal of Computer Engineering and Technology, 15(6). DOI: 10.5281/zenodo.14066016.
6. EY-Parthenon. (2024). *Generative AI in Insurance*. Global Insurance: GenAI Survey Report. Available at: https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/insights/insurance/documents/ey-gl-generative-ai-in-insurance-05-2024.pdf. (Accessed: 1 May 2025)
7. Gangani, C.M. (2024). *AI in Insurance: Enhancing Fraud Detection and Risk Assessment*. International IT Journal of Research, 2(2), April–June 2024. Available at: https://www.researchgate.net/publication/389943252 (Accessed: 10 March 2025).
8. IBM Institute for Business Value. (2024). *Generative AI in the Insurance Industry: You Can't Win if You Don't Play*. IBM Research Insights. Available at: https://www.ibm.com/thought-leadership/institute-business-value/en-us/report/insurance-generative-ai (Accessed: 8 March 2025).
9. Jain, V. and Roy, G. (2022). *Role of Artificial Intelligence in Gamification for the Emerging Markets*. In: Management and Information Technology in the Digital Era, Vol. 29.

Emerald Publishing. Available at: www.researchgate.net/publication/364052199 (Accessed: 3 May 2025).
10. Kate, P., Vadlamani, R., Gangwar, A. (2022). *FinGAN: Chaotic generative adversarial network for analytical customer relationship management in banking and insurance*. Neural Computing and Applications, 35(10). DOI: 10.1007/s00521-022-07968-x.
11. Kuppan, K., Acharya, D.B. and Divya, B. (2024). *Foundational AI in Insurance and Real Estate: A Survey of Applications, Challenges, and Future Directions*. IEEE Access, 12, pp.1–20. DOI: 10.1109/ACCESS.2024.3509918
12. Margan, S. K., Logan, C. (2025). *Behavioral insurance reshapes risk models*. Insurance Thought Leadership. Available at: https://www.insurancethoughtleadership.com/underwriting/behavioral-insurance-reshapes-risk-models (Accessed: 2 April 2025).
13. Onabowale, O. (2025). *Navigating the Fintech Landscape: The Impact of RegTech and InsurTech on Financial Services*. International Journal of Computer Applications Technology and Research, 14(2). DOI: 10.7753/IJCATR1402.1007.
14. Owens, E., Sheehan, B., Mullins, M., Cunneen, M., Ressel, J. and Castignani, G. (2022). *Explainable Artificial Intelligence (XAI) in Insurance*. Risks, 10(12), p.230. DOI: 10.3390/risks10120230
15. Pareek, C. S. (2025). *Testing ethical AI in life insurance: Ensuring fairness, transparency, and accountability in automated decisions*. International Journal of Future Engineering Innovations, 2(2). DOI: 10.54660/IJFEI.2025.2.2.43-50.
16. Pingili, R. (2024). *The Role of AI in Personalizing Insurance Policies*. International Journal of Scientific Research in Computer Science, Engineering and Information Technology, 10(6). DOI: 10.32628/CSEIT24106194
17. Sloane, M. and Wüllhorst, E. (2025). *A systematic review of regulatory strategies and transparency mandates in AI regulation in Europe, the United States, and Canada*. Data & Policy, 7. DOI: 10.1017/dap.2024.54
18. Tase, J. (2024). *Generative AI in Insurance Industries: Transforming Workflows and Enhancing Customer Experience*. International Research Journal of Engineering and Technology, 11(7), pp. 511–518. Available at: https://www.researchgate.net/publication/382881151 (Accessed: 27 April 2025).
19. Zarifis, A., Holland, C.P. and Milne, A. (2019). *Evaluating the impact of AI on insurance: The four emerging AI- and data-driven business models*. Emerald Open Research, 1(15). DOI: 10.35241/emeraldopenres.13249.1